

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~Crucible~~ A crucible for a device for producing a block of crystalline material by directed crystallization, said crucible presenting side walls opaque to infrared radiation and a ~~bottom, bottom transparent to infrared radiation,~~ the bottom having, parallel to a direction substantially perpendicular to the bottom, much greater heat transfer properties than those of the side walls along said ~~direction, crucible wherein the bottom and side walls are formed by materials having the same main chemical constituents,~~ direction.
2. (Canceled)
3. (Currently Amended) ~~Crucible~~ The crucible according to ~~claim 2,~~ claim 1, wherein the bottom is made of amorphous silica, the side walls being made of opaque quartz ceramic.
4. (Currently Amended) ~~Crucible~~ A crucible for a device for producing a block of crystalline material by directed crystallization, presenting side walls and a bottom, ~~according to claim 1, wherein~~ the bottom and side walls are formed by plates made from the same material having anisotropic thermal conduction properties, the thermal conductivity of the plates, in the plane of the plates, being much lower than their thermal conductivity perpendicularly to this plane.
5. (Currently Amended) ~~Crucible~~ The crucible according to claim 4, wherein the crucible is made of graphite.
6. (Currently Amended) ~~Crucible~~ The crucible according to claim 1, wherein the crucible comprises at least one coating on at least one face of the side walls.

7. (Currently Amended) ~~Crucible~~ The crucible according to claim 6, wherein the material of the coating is chosen from silicon nitride and reflecting materials.

8. (Currently Amended) ~~Device~~ A device for producing a block of crystalline material by directed crystallization, comprising a crucible arranged in an insulating enclosure between heating means arranged above the crucible and cooling means arranged below the crucible, ~~device~~ wherein the crucible is a crucible according to claim 1.

9. (Currently Amended) ~~Device~~ The device according to claim 8, comprising a graphite felt, arranged between the bottom of the crucible and the cooling means, and compression means to compress the graphite felt during crystallization of the crystalline material.

10. (Canceled)

11. (New) The crucible according to claim 4, wherein the crucible comprises at least one coating on at least one face of the side walls.

12. (New) The crucible according to claim 11, wherein the material of the coating is chosen from silicon nitride and reflecting materials.

13. (New) A device for producing a block of crystalline material by directed crystallization, comprising a crucible arranged in an insulating enclosure between heating means arranged above the crucible and cooling means arranged below the crucible, wherein the crucible is a crucible according to claim 4.

14. (New) The device according to claim 13, comprising a graphite felt, arranged between the bottom of the crucible and the cooling means, and compression means to compress the graphite felt during crystallization of the crystalline material.